

CLAIMS

1. A method of coating an electric wire comprising cationic electrocoating with a cationic electrodeposition
5 coating composition,

wherein the cationic electrodeposition coating composition contains a resin composition having a hydratable functional group reducible directly by an electron and results in forming passive coat.

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2. The method of coating an electric wire according to Claim 1,

wherein the resin composition is a sulfonium group- and propargyl group-containing one.

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3. The method of coating an electric wire according to Claim 1 or 2,

wherein the resin composition has a sulfonium group content of 5 to 400 millimoles, a propargyl group content
20 of 10 to 495 millimoles and a total content of the sulfonium and propargyl groups of not more than 500 millimoles, per 100 g of the solid matter in said resin composition.

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4. The method of coating an electric wire according to any of Claim 1 to 3,

wherein the resin composition has a sulfonium group content of 5 to 250 millimoles, a propargyl group content of 20 to 395 millimoles and a total content of the
30 sulfonium and propargyl groups of not more than 400 millimoles, per 100 g of the solid matter in said resin composition.

5. The method of coating an electric wire according
35 to any of Claim 1 to 4,

wherein the resin composition has an epoxy resin as a skeleton.

6. The method of coating an electric wire according
5 to any of Claim 1 to 5,

wherein the epoxy resin is a novolak cresol epoxy resin or a novolak phenol epoxy resin and has a number average molecular weight of 700 to 5000.

10 7. The method of coating an electric wire according to any of Claim 1 to 6,

wherein the cationic electrocoating is carried out using a cationic electrocoating apparatus for an electric wire comprising an electrodeposition means, a washing means
15 and a heating means as combined in that order.

8. The method of coating an electric wire according to Claim 7,

wherein the electrodeposition means is one in which
20 an article to be coated is immersed in an electrodeposition bath for 0.1 to 10 seconds.

9. The method of coating an electric wire according to any of Claim 1 to 8,

25 wherein the article to be coated is an electric wire having at least one edge.

10. The method of coating an electric wire according to any of Claim 1 to 9,

30 wherein the article to be coated is a square electric wire.

11. An insulated wire obtained by the method of coating an electric wire according to any of Claim 1 to 10.